(12) INTERNATIONAL APPLICATION PUBLISHED UNDER TH

ENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



I STATA BUNDUNIN IN BURNE UNIN BONI BUNT BUNT BURN IN BARRA BUNT BUNT BUNT BUNTAN BURNE IN BURNEN IN BURNEN IN

(43) International Publication Date 17 June 2004 (17.06.2004)

PCT

(10) International Publication Number WO 2004/050313 A1

(51) International Patent Classification7:

B26B 19/40

(21) International Application Number:

PCT/IB2003/005066

(22) International Filing Date:

6 November 2003 (06.11.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 02080062.9

3 December 2002 (03.12.2002)

(71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

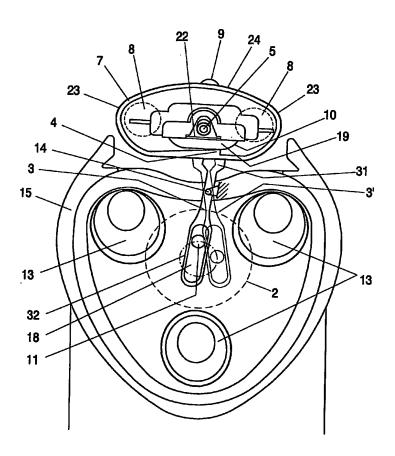
(75) Inventor/Applicant (for US only): GROSS, Jeroen, A.

[NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

- (74) Agent: BOS, Kornelis, S.; Philips Intellectual Property & Standards, Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT. RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

[Continued on next page]

(54) Title: HAIR REMOVING APPARATUS



(57) Abstract: A hair removing apparatus has hair removing device (13) for at least partially removing hair projecting from a skin; a liquid channel (16) leading to a liquid outlet (12); a pump (5) for causing liquid displacement through the liquid channel to the liquid outlet; a motor (1) coupled to the hair removing device (13); a transmission coupled to the motor (1) and to the pump (5); and a control structure (4,7-9) operable between at least a first and a second operating condition for dispensing liquid at different rates. The control structure (4,7-9) is arranged for controlling amounts of movement transmitted by the transmission to the pump such that, in the first and second operating conditions, different amounts of movement are transmitted by the transmission to the pump.

WO 2004/050313 A1



ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

with international search report

Internation on No PCT/IB 03/05066

			LC1/1B 03/0500	00						
IPC 7	BIFICATION OF SUBJECT MATTER B26B19/40									
According to International Patent Classification (IPC) or to both national classification and IPC										
B. FIELDS SEARCHED										
IPC /	B26B									
	ition searched other than minimum documentation to the extent that									
Electronic d	data base consulted during the international search (name of data b	ase and, where practical,	search terms used)							
C. DOCUMENTS CONSIDERED TO BE RELEVANT										
Category °	Citation of document, with indication, where appropriate, of the re	elevant passages	R	elevant to claim No.						
A	US 3 176 392 A (GWINN ROBERT P) 6 April 1965 (1965-04-06) column 7, line 8-28; figure 2		1							
Α	FR 2 613 975 A (KUSTER JEAN ;KUS (FR); KUSTER MARTINE (FR)) 21 October 1988 (1988-10-21) page 4, line 24-29; figures 1,2 page 6, line 16 -page 7, line 9	TER RENE	1							
Α	US 6 308 413 B1 (VAN TOOR JOHANN AL) 30 October 2001 (2001-10-30) the whole document	ES H ET	1							
A	US 5 121 541 A (PATRAKIS STRATI (16 June 1992 (1992-06-16)) the whole document	G)	1							
Furth	er documents are listed in the continuation of box C.	X Patent family m	embers are listed in annex.							
° Special cat	egories of cited documents :									
"A" docume	nt defining the general state of the art which is not	or priority date and i	hed after the international fi not in conflict with the applic	ation but						
'E' earlier d	ered to be of particular relevance ocument but published on or after the international	invention	the principle or theory under							
"L" documer	ate nt which may throw doubts on priority claim(s) or s cited to establish the publication date of another	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone								
citation	or other special reason (as specified) nt referring to an oral disclosure, use, exhibition or	document is combin	r relevance; the claimed inv d to involve an inventive ste ed with one or more other s	p when the uch docu-						
"P" documer	nt published prior to the international filing date but	ation being obvious to a per the same patent family	son skilled							
Date of the a	ctual completion of the international search	Date of mailing of the international search report								
27	January 2004	02/02/20								
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2		Authorized officer								
NL – 2280 HV Rijswijk Tel. (+31-70) 340–2040, Tx. 31 651 epo nl, Fax: (+31-70) 340–3016		Rattenbe	Rattenberger, B							

INTERNATIONAL SEATH REPORT

Internations On No PCT/IB 03/05066

Patent document cited in search report		Publication date		Patent family	Publication
· · · · · · · · · · · · · · · · · · ·		gate		member(s)	date
US 3176392	Α	06-04-1965	GB	1017538 A	19-01-1966
			US	3299506 A	24-01-1967
FR 2613975	A	21-10-1988	FR	2613975 A1	21-10-1988
US 6308413	B1	30-10-2001	AT	194790 T	15-08-2000
			CN	1199359 A ,B	18-11-1998
			CN	1199360 A ,B	18-11-1998
			DE	69702592 D1	24-08-2000
			DE	69702592 T2	15-03-2001
			EP	0857101 A1	12-08-1998
			EP	0858384 A1	19-08-1998
			EP	0861142 A1	02-09-1998
			ES	2150268 T3	16-11-2000
			WO	9808659 A1	05-03-1998
			WO	9808660 A1	05-03-1998
			WO	9808661 A1	05-03-1998
			JP	11514562 T	14-12-1999
			JP	2002514951 T	21-05-2002
			JP	2000500055 T	11-01-2000
			US	6126669 A	03-10-2000
			US	5993180 A	30-11-1999
			US	6312436 B1	06-11-2001
			US	2002032964 A1	21-03-2002
			ΑT	246576 T	15-08-2003
			DE	69816960 D1	11-09-2003
	_		EΡ	0930960 A1	28-07-1999
			WO	9855274 A1	10-12-1998
			JP	2000516124 T	05-12-2000
			US	6131288 A	17-10-2000
US 5121541	Α	16-06-1992	NONE	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	